

Amendments to the Specification:

Please amend the specification as referred to in the enclosed "Translation of PCT/EP2005/002810, (WO 2005/089727)":

Page 2, Paragraph b, beginning on Line 13

b) **Switching of the permeability** permeability^[3,4]

Here, capsules are used whose permeability changes with change in the pH or the ionic strength of the solution. The capsules are added to a solution of the macromolecule and switched into a permeable state by addition of salt or change in the pH. After the penetration of the polymers, the pH is switched back again or the salt is washed away and the macromolecules are immobilized in the interior. The disadvantage lies in the necessity of using special, switchable capsules. Furthermore, hitherto only low concentrations can be encapsulated.

Page 10, Line 37, please insert the following paragraph:

"The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee."

Page 11, Lines 10 and 14

The active compounds can be present in molecular form, aggregated, as a complex or in colloidal form. In particular, the active compounds to be encapsulated are polymers and/or and/or proteins and/or and/or organic molecules having molecular weights over 100 g/mol and/or nanoparticles. In particular, they can in this case be enzymes and/or catalysts and/or dyes and/or pharma-ceutical or cosmetic active compounds and/or and/or plant protection agents. The active compounds to be encapsulated can have a different affinity or binding constant with respect to deposition in the pores. The active compounds occupy the available binding sites on the interior

surface depending on their binding constants. This different affinity can be utilized in the loading of the templates with a number of active compounds.

Page 15, Line 8

Subsequently, alternating layers 8 of cationically and anionically charged substances (polyelectrolytes), preferably polymers, are applied to this primer layer 6 until the desired semi- or impermeability of the LbL capsule wall 9 is achieved for the substance enclosed. The permeability of the LbL capsules can be specifically adjusted here for the particular material encapsulated by means of the layer number, the choice of material, by an aftertreatment by means of annealing, or by implementation of further substances into the capsule wall^[8]. After the construction of the capsule wall, CS particles 10 having a filled porous core are present. Suitable substances for the formation of the capsule wall and [[a]] suitable process courses can be inferred from the already mentioned documents DE 198 12 083 A1, DE 199 07 552 A1, EP 0 972 563 A1, WO 99/47252 and US 6,479,146.

Page 21, Line 8

Figure 5 shows confocal images of CS particles and capsules which are filled with 2 positively charged polymers PAH/Rho and low molecular weight chitosan-Flu and encapsulated using chit chitosan(PSS/PAH)₃PSS; a) CS particles in the rhodamine channel PMT2 600 V, image size 80 µm x 80 µm; b) CS particles in the fluorescein channel PMT1 500 V, image size 80 µm x 80 µm; c) capsules in the rhodamine channel PMT2 700 V, image size 80 µm x 80 µm, d) capsules in the fluorescein channel PMT1 550 V, image size 80 µm x 80 µm.

Page 22, Line 3

Figure 6 a shows confocal images of capsules which are filled with positively charged magnetite nanoparticles and encapsulated using chit chitosan(PSS/PAH)₃PSS (80 µm x 80 µm). Figure 6b shows how the capsules can be collected in an Eppendorf tube by

means of a magnet on the top.

Page 23, Line 14

Figure 7 shows confocal images of CS particles and capsules which are filled with a PAH-Rho/PSS complex and surrounded with ~~chit~~ chitosan(PSS/PAH)₃PSS, a) CS particles in the rhodamine channel PMT2 600 V, image size 40 µm x 40 µm; b) CS particles in the Cy5 channel PMT1 500 V, image size 40 µm x 40 µm; c) capsules in the rhodamine and Cy5 channel superimposed, 2 holes which are location-stable were burnt in the capsules using high laser power, image size 40 µm x 40 µm, d) capsules produced according to Example 1 (PAH-Rho-filled) after drying, image size 40 µm x 40 µm, e) capsules having a PAH-Rho/PSS framework after drying, image size 40 µm x 40 µm.

Page 23, Line 27

Figure 8 shows individual process steps for the production of microtemplates 16, which ~~consists~~ consist here of a filigree framework of polyelectrolyte and/or nanoparticle layers 14. For this, porous templates 2 having alternately charged polyelectrolyte and/or nanoparticle layers 14 are filled, i.e. these materials coat the interior surface (pore surface) of the templates 2 and optionally also the exterior surface of the templates. After the dissolution of the templates 2, microtemplates 16 remain, which can be surrounded by partly or largely closed polyelectrolyte and/or nanoparticle layers.